

AMENDMENTS TO CLAIMS

Kindly cancel claims 27-29 and 35-51 and add new claims 52-67 as follows.

27. (Cancel) A method for communication between a mobile computer terminal and a host computer in a system in which it is necessary in order to avoid being disconnected for the mobile computer terminal to send a message to the host computer, including the steps of:

determining a particular time at which the mobile computer terminal is to send the message to the host computer;

programming a timer or clock to wake up the mobile computer terminal so that the mobile computer terminal can send the message at said particular time;

entering the mobile computer into a sleep mode;

waking up the mobile computer terminal due to the programming of the timer or clock; and

sending the message at said particular time.

28. (Cancel) The method of claim 27, wherein said system is a system utilizing the limited leasing of IP addresses and said message is a message begging for more time.

29. (Cancel) The method of claim 28, further including the steps of:

determining if the mobile computer is out of range of communications with the host computer; and

displaying a message on the mobile computer indicating to the user that the mobile computer must be brought back into range of communications with the host computer or else said leased IP address may be forfeited.

Claims 30-34 were previously canceled.

35. (Cancel) The method of claim 27, wherein said message is a lease renewal message.

36. (Cancel) The method of claim 29, further including the step of:
resetting said timer or clock for a next scheduled beg time if the mobile computer is out of range of communications with the host computer.

37. (Cancel) A mobile computer terminal in a system in which it is necessary in order to avoid being disconnected for the mobile computer terminal to send a message to a host computer, including:

a communications module for communication with the host computer in a system;

means for determining a particular time at which the mobile computer terminal is to send the message to the host computer;

means for programming a timer or clock to wake up the mobile computer terminal so that the mobile computer terminal can send the message at said particular time;

means for entering a sleep mode; and

means for waking up due to the programming of the timer or clock to send the message at the particular time.

38. (Cancel) The mobile computer terminal of claim 37, wherein said system is a system utilizing the limited leasing of IP addresses and said message is a message begging for more time.

39. (Cancel) The mobile computer terminal of claim 38, further including:

means for determining if the mobile computer is out of range of communications with the host computer; and

means for displaying a message on the mobile computer indicating to the user that the mobile computer must be brought back into range of communications with the host computer or else said leased IP address may be forfeited.

40. (Cancel) The mobile computer terminal of claim 37, wherein said message is a lease renewal message.

41. (Cancel) The mobile computer terminal of claim 39, further including:

means for resetting said timer or clock for a next scheduled beg time if the mobile computer is out of range of communications with the host computer.

42. (Cancel) A mobile computer terminal including:

a communications module for communication with a base unit or host computer in a system;

a hand-held image scanner;

a processor; and

a memory having stored therein program instructions for reading by the processor such that the mobile computer terminal performs the steps of:

reading an image by said hand-held scanner;

transforming data corresponding to the image read, the transformed data to be transferred from the mobile computer terminal for eventual entry into a database;

sending the transformed data to a base unit or host computer according to coordinated data formatting and ordering between the mobile terminal and the base unit or host computer;

determining a particular time at which the mobile computer terminal is to send a message to the base unit or host computer to avoid being disconnected;

programming a timer or clock to wake up the mobile computer terminal so that the mobile computer terminal can send the message at said particular time;

entering the mobile computer terminal into a sleep mode; and

waking up the mobile computer terminal from the sleep mode due to the programming of the timer or clock to send the message at the particular time.

43. (Cancel) The mobile computer terminal of claim 42, wherein said system is a system utilizing the limited leasing of IP addresses and said message is a message begging for more time.

44. (Cancel) The mobile computer terminal of claim 43, the memory having stored therein further program instructions for reading by the processor such that the mobile computer terminal performs the further steps of:

determining if the mobile computer is out of range of communications with the base unit or host computer; and

displaying a message on the mobile computer indicating to the user that the mobile computer must be brought back into range of communications with the base unit or host computer or else said leased IP address may be forfeited.

45. (Cancel) The mobile computer terminal of claim 42, wherein said message is a lease renewal message.

46. (Cancel) The mobile computer terminal of claim 44, the memory having stored therein further program instructions for reading by the processor such that the mobile computer terminal performs the further step of:

resetting said timer or clock for a next scheduled beg time if the mobile computer is out of range of communications with the base unit or host computer.

47. (Cancel) A method for communication between a mobile computer terminal and a base unit or host computer in a system in which it is necessary for the mobile computer terminal to send a message to the base unit or host computer to avoid being disconnected, the mobile computer terminal at least including a hand-held image scanner, a processor, and a memory, the method comprising the steps of:

reading an image by said hand-held image scanner;

transforming data corresponding to the image read, the transformed data to be transferred from the mobile computer terminal for eventual entry into a database;

sending the transformed data to a base unit or host computer according to coordinated data formatting and ordering between the mobile terminal and the base unit or host computer;

determining a particular time at which the mobile computer terminal is to send a message to the base unit or host computer to avoid being disconnected;

programming a timer or clock to wake up the mobile computer terminal so that the mobile computer terminal can send the message at said particular time;

entering the mobile computer terminal into a sleep mode; and

waking up the mobile computer terminal from the sleep mode due to the programming of the timer or clock to send the message at the particular time.

48. (Cancel) The method of claim 47, wherein said system is a system utilizing the limited leasing of IP addresses and said message is a message begging for more time.

49. (Cancel) The mobile computer terminal of claim 48, the method further comprising the steps of:

determining if the mobile computer is out of range of communications with the base unit or host computer; and

displaying a message on the mobile computer indicating to the user that the mobile computer must be brought back into range of communications with the base unit or host computer or else said leased IP address may be forfeited.

F¹ 50. (Cancel) The mobile computer terminal of claim 47, wherein said message is a lease renewal message.

51. (Cancel) The mobile computer terminal of claim 49, the method further comprising the step of:

resetting said timer or clock for a next scheduled beg time if the mobile computer is out of range of communications with the base unit or host computer.

F² 52. (NEW) A method for preventing a mobile computer from being disconnected from a network comprising:

determining a termination time of a network connection for said mobile computer;

setting a timer for a time prior to said termination time responsive to said determination of said termination time;

setting said mobile computer into a sleep mode responsive to setting of said timer;

setting said mobile computer to an active mode responsive to said timer expiring; and

transmitting a message from said mobile computer to a host computer in said network responsive to said mobile computer being set to said active mode.

53. (NEW) The method of claim 52 wherein said message is a request for an extension of a lease of an Internet Protocol Address for said mobile computer.

54. (NEW) The method of claim 52 further comprising:
determining whether said mobile computer is out of transmission range of said host computer;

displaying an out of range message on a display screen of said mobile computer responsive to a determination that said mobile computer is out of said transmission range;

setting a re-transmit timer responsive to a determination of said mobile computer being out of said transmission range; and
re-transmitting said message responsive to an expiration of said re-transmit timer.

55. (NEW) The method of claim 52 wherein said message is a lease renewal message.

56. (NEW) A mobile computer terminal comprising:

means for determining an expiration time for a network connection for said mobile computer terminal;

means for setting a wake-up timer that expires prior to said expiration time;

means for setting said mobile computer terminal to a sleep mode responsive to said wake-up timer being set;

means for setting said mobile computer terminal to an active mode responsive to said wake-up timer expiring; and

means for transmitting a message to said network prior to said expiration time responsive to said mobile computer terminal being set to an active mode.

57. (NEW) The mobile computer terminal of claim 56 wherein said message includes a request to extend a lease of an Internet Protocol Address for said mobile computer terminal.

58. (NEW) The mobile computer terminal of claim 56 further comprising:

means for determining whether said mobile computer terminal is out of transmission range of said host computer;

means for displaying an out of range message on a display screen of said mobile computer responsive to a determination that said mobile computer terminal is out of said transmission range;

means for setting a re-transmit timer responsive to a determination of said mobile computer terminal being out of said transmission range; and

means for re-transmitting said message responsive to an expiration of said re-transmit timer.

59. (NEW) The mobile computer terminal of claim 56 wherein said message is a lease renewal message.

60. (NEW) A mobile computer terminal comprising:

a transceiver unit for transmitting and receiving messages;

a hand-held image scanner;

a processing unit;

instructions for directing said processing unit to:

read an image from said hand-held image scanner,

transform data corresponding to said image,

generate a data message including said data, said data message having a format and ordering expected by a host computer system,

transmit said data message to said host computer system,

determine an expiration time for a connection time between said mobile computer terminal and said host computer system,

set a timer to expire prior to said expiration time,

set said mobile computer terminal to a sleep mode responsive to setting said timer,

set said mobile computer terminal to an active mode responsive to an expiration of said timer, and

transmit a connection message to said host computer system prior to said expiration time responsive to said mobile computer terminal being set to an active state; and

a media readable by said processing unit that stores said instructions.

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61. (NEW) The mobile computer terminal of claim 60 wherein said connection message requests an extension of a lease of an Internet Protocol Address for said mobile computer terminal.

62. (NEW) The mobile computer terminal of claim 60 wherein said instructions further comprise:

instructions for directing said processing unit to:

determine whether said mobile computer terminal is out of transmission range of said host computer,

display an out of range message on a display screen of said mobile computer terminal responsive to a determination that said mobile computer is out of said transmission range,

set a re-transmit timer responsive to a determination of said mobile computer terminal being out of said transmission range, and

re-transmit said message responsive to an expiration of said re-transmit timer.

63. (NEW) The mobile computer terminal of claim 60 wherein said connection message is a lease renewal message.

64. (NEW) A method for transmitting data between a mobile computer terminal and a host computer system wherein said mobile computer terminal includes a transceiver unit for transmitting and receiving messages, said method comprising:

reading an image from said hand-held image scanner;

transforming data corresponding to said image;

generating a data message including said data, said data message having a format and ordering expected by a host computer system;

transmitting said data message to said host computer system;

determining an expiration time for a connection time between said mobile computer terminal and said host computer system;

setting a timer in said mobile computer terminal to expire prior to said expiration time;

setting said mobile computer terminal to a sleep mode responsive to setting said timer;

setting said mobile computer terminal to an active mode responsive to an expiration of said timer; and

transmitting a connection message from said mobile computer terminal to said host computer system prior to said expiration time responsive to said mobile computer terminal being set to an active state.

65. (NEW) The method of claim 64 wherein said connection message requests an extension of a lease of an Internet Protocol Address for said mobile computer terminal.

66. (NEW) The method of claim 64 further comprising:

determining whether said mobile computer terminal is out of transmission range of said host computer;

displaying an out of range message on a display screen of said mobile computer terminal responsive to a determination that said mobile computer is out of said transmission range;

setting a re-transmit timer responsive to a determination of said mobile computer terminal being out of said transmission range; and
re-transmitting said message responsive to an expiration of said re-transmit timer.

67. (NEW) The method of claim 64 wherein said connection message is a lease renewal message.
